

Becoming digitally literate: Reinstating an educational lens to digital skills policies for adults

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The development of digital skills for all is a key focus of many educational policies across the globe. Despite the significant attention paid to the nature and suitability of such policies targeted at young people, there has been far less focus on digital skills policies targeted at adults. This article contributes to this literature. It outlines current digital skills policy in England. Having established this background, it analyses 30 interviews with digitally competent adults from lower socio-economic backgrounds about their experiences of learning to use the Internet. In doing so, the article highlights that a narrow and instrumental digital skills agenda is emerging in the education of adults, driven by the needs of the commercial sector, that is in stark contrast to the experiences, motivations and hopes of adults who learn about, and use, digital technologies. Reframing digital skills as part of a broader adult education agenda may offer a way to facilitate the development of digital literacies that individuals seek.

Keywords: adult education; digital skills; digital literacies; digital inclusion; digital inequalities; lifelong learning

Introduction

A significant aspect of government policy in many countries is to ensure that everyone can meaningfully engage with new technologies to ensure society is prepared for the ‘fourth industrial revolution’ (Schwab, 2016). This is due to a long-standing assumption that ensuring all individuals are digitally skilled facilitates a fairer and economically more successful society (Brynjolfsson & McAfee, 2014).

Despite the realities being significantly more complex, policymakers across the globe have developed an array of initiatives to encourage individuals to develop skills to use new technologies (Epstein et al., 2011; Helsper & van Deursen, 2015; Mansell, 2017). Efforts to support the development of digital skills are apparent in schools, higher education institutions, vocational colleges, libraries and adult learning settings that aim to support people in developing digital competences for everyday life and employment (see e.g. the overview provided by Atchoarena *et al.*, 2017).

Precisely what is meant by digital skills is a question of longstanding debate, made more challenging due to the constantly changing nature of both society and ‘the

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digital'. In many countries, policymakers have opted for a focus on individuals' proficiency of operational, evaluative or strategic kinds of skills (van Deursen and van Dijk, 2010; Helsper & Eynon, 2013; Pangrazio, 2016), which are typically viewed on a continuum from basic to specialist (Atchoarena *et al.*, 2017). For example, the European DigComp framework, developed and promoted by the European Commission, comprises five competence areas (information data literacy, communication and collaboration, digital content creation, safety and problem-solving) and eight proficiency levels from foundational to highly specialised (Carretero *et al.*, 2017).

The implicit assumption in such digital skills initiatives is that if individuals have the necessary competence, then they are fully equipped to make the most of the opportunities of new technologies, using them to save money, learn, find employment and so on, regardless of their socio-economic background; and indeed, they can use the internet as a resource to achieve 'social mobility'. This set of assumptions can be seen both within formal schooling and across the life course, at all skill proficiency levels (e.g. Davies & Eynon, 2018; Eynon *et al.*, 2018).

Critical scholars question the evidence for such assumptions, pointing to a wealth of literature that shows that digital skills are not a panacea to all social and economic challenges that individuals and society face. Researchers have, for example, questioned the realities that digital competences straightforwardly equate to an economically successful job or other positive social outcome (e.g. Straubhaar *et al.*, 2012); problematise how many policies focus on individual responsibility, yet ignore structural inequalities (e.g. Keep, 1997; Allatt & Tett, 2019); raise significant concerns about the increasing intensification of economic justifications for learning at the neglect of more personal or democratic motivations (e.g. Biesta, 2006); and highlight the resultant narrowing of what it means to be digitally competent to fit these economic framings (Wallis & Buckingham, 2019).

At the school level, there has been much debate about the need for a more democratic educational agenda related to digital skills policies, with many concerned that there is a significant disconnect between what young people want and need to learn as part of their formal education and what schools offer (Biesta, 2013; Morgan, 2016; Wallis & Buckingham, 2019). Yet there has been far less research on the current offerings to support the development of digital skills for adults.

Using England as the focus, this article aims to contribute to this important area of work. First, an outline of the current digital skills policy in England is provided. Having established this background, the article uses a social justice lens to analyse the data from 30 interviews with digitally competent adults from lower socio-economic backgrounds about their experiences of learning to use the internet.

Digital skills policy in England

England makes a good case for this study. It has a long history of adult education. Furthermore, like many advanced market economies, it has, for a number of years, invested in a variety of digital skills strategies for adults. The most recent policy impetus for a focus on digital skills has come from two related sources: a concern about 'the digital skills crisis'¹ and a continuing commitment to facilitating digital inclusion² in the UK.

Much of the current activity and government commitments for digital skills initiatives are set out in the UK Digital Strategy, published in 2017 by the Department for Culture, Media and Sport (DCMS). The UK Digital Strategy echoes many of the sentiments outlined in the Introduction, arguing that ‘for the UK to be a world-leading digital economy that works for everyone, it is crucial that everyone has the digital skills they need to fully participate in society’ (DCMS, 2017a: n.p.). A related digital inclusion and skills policy paper written by the DCMS notes that: ‘digital inclusion and skills are a gateway for citizens to achieve a broad range of positive outcomes: gaining employment; saving money; expanding career opportunities; reducing isolation; improving health and wellbeing and much more’ (DCMS, 2017b). There are a variety of initiatives to facilitate digital skills, from ‘basic’ to ‘advanced’, across all life stages; to meet these varied objectives—from ensuring everyone can interact with services online, to a focus on digital skills for the general workforce, to strategies that ensure the UK has sufficient numbers of specialist workers in IT (Digital Skills for the UK Economy, 2016). The economic agenda is the primary focus in these policies; engagement and participation are mentioned as important considerations but are discussed in a relatively tokenistic way.

Given this broad focus, responsibility for digital skills crosses a number of government departments—particularly, the DCMS, Department for Education (DfE) and Department for Business, Innovation and Skills (BIS). Since the last round of digital inclusion policies in 2014, the majority of initiatives and funding for supporting adult skills has primarily been led by DCMS, with some input from BIS, with the DfE largely focusing on schools. Yet, in 2018 this began to change, when a draft of the essential digital skills framework was introduced by the DfE, as a result of legislation introduced in 2017 to give adults without basic skills the right to access free training (The Digital Economy Act, 2017), and funding for the Future Digital Inclusion programme (that aims to get 1 million people who are socially excluded online) moved from BIS to the DfE.

The new national standards for essential digital skills are published and have been used in teaching programmes from August 2020, with associated qualifications being available. Despite the increasing involvement of the DfE, the national standards for basic digital skills are fairly instrumental in orientation. In defining what is knowledge and understanding, the standards focus on ‘basic concepts which underpin the skills (for adult learners) to develop their own use of technology subsequently’ (DfE, 2019: 4). The standards cut across five areas (handling information, creating and editing digital content, communicating, transacting, and being safe and responsible online) and are specified for two levels: ‘entry’ and ‘level 1’. The main focus is on operational skills and tends to encourage a responsive approach to technology that is accepting of the status quo, where a small number of very powerful companies dominate the technological landscape. For example, creating content is focused on formatting and entering types of data; that is useful for work and for companies that require users to complete forms, but has a limited role in enabling people to create and share content for themselves. ‘Being responsible online’ equates to ‘know how to report concerns with online content’ (entry level) and ‘use appropriate language and behaviour online’ (level 1). Digital wellbeing is similarly anodyne: ‘recognize and minimize the effects of physical stresses of being online’ (entry level) and ‘explain and routinely

apply simple methods to avoid physical and psychological health risks while using devices' (level 1). Although these standards relate to basic skills, the standards set a particular framing of what digital technology 'is', what it is for, and the nature of the relationship between the 'user' and the internet.

The delivery of digital skills initiatives for adults is met via a collection of different actors, described as the Digital Skills Partnership,³ that brings together 'the public, private and third sector, to tackle the digital skills gap in a co-ordinated and coherent way'. There are currently six pilots in place for local digital skills partnerships across England. Unsurprisingly, the majority of commercial partners are from the IT sector: Google, BT, Cisco, HP, IBM and Lloyds Banking Group are prominent members. This connection with commercial actors is not new and can be traced across the history of digital inclusion policy in the UK.

Meeting the needs of the local and national economy features heavily in the priorities of the Digital Skills Partnership, as does a strong focus on evaluation, and the sharing of best practice. Far less prominent (at least at this stage) is how digital skills will be taught or how adults will be recruited or attracted to these initiatives. There is funding specifically available for initiatives that support the development of digital skills of under-represented groups and disabled people. Yet beyond this, the 'end-user', 'learner' or indeed adult is relatively absent from all documents, and learning skills is understood in a 'commonsense' manner (i.e. as a set of 'things' to be 'acquired' by the individual) (Biesta, 2015; Ball, 2017).

At present, the success of digital skills training for adults at a national level is measured with data provided by national surveys, where the main indicators are focused on the uptake of Internet use—including participation in specific economic and social activities (e.g. job seeking, gaining a qualification online, saving money, health information seeking, using a government service) (e.g. Lloyds, 2020). Skills are measured via an assessment of foundational tasks (relating to operating and setting up a device) that are seen as a pre-requisite to achieving 'essential digital skills' as measured based on items reflecting the five areas discussed above, with questions that are designed to capture 'skills for life' and 'skills for work' (DfE, 2019; Lloyds, 2020). Overall, a commitment to the use of evidence to inform the UK Digital Strategy is apparent, but as most of the items are operational in nature they reflect and reinforce the narrow and instrumental views of digital skills outlined above.

In essence, digital skills are narrowly framed; economic goals tend to be prioritised over personal and democratic ones (Biesta, 2013). There is a strong focus on developing skills that are primarily enabling people to carry out tasks to aid with government and commercial sector efficiencies (e.g. applying for benefits or applying for a job) or to encourage consumer and entertainment behaviour (e.g. chatting to friends, buying things on eBay) that are economically valuable. In essence, there is an emphasis in these policy documents on teaching people to be consumers and not producers of technology (Stevenson, 2009). While there remains some level of commitment to personal and democratic aims of digital skills training in theory, attention to the learner or to pedagogy is largely absent in current policy.

This narrow and instrumental focus is not unique, and is similar to literacy policies and lifelong learning policies more broadly in the UK and across other OECD countries (Biesta, 2006; Allatt & Tett, 2019). In part, this is a result of the government

departments (DCMS and BIS) engaged in supporting these initiatives and their different priorities. It is also likely due to the strong presence of commercial actors in the shaping of the debate towards their own needs and interests (Ball, 2012). There is, of course, never a direct or straightforward match between ‘intended policy’, ‘actual policy’ and ‘policy in use’ (Ball & Bowe, 1992).

The ways that practitioners will teach digital literacy is not a direct translation of policy, it is very much mediated by the local contexts and cultures within which practitioners work; and they do take a stance which acknowledges people’s existing knowledge, understanding, experiences and skills. They will often work around government targets and agenda setting to continue to provide a broader literacy education that connects with an individual’s interests, motivations, local community and technological resources (Smythe, 2015; Allatt & Tett, 2019), sometimes referred to as a learning ecology (Barron, 2006). Yet, these instrumental policies do have an impact on the opportunities people have to learn, what people are taught and how they are taught.

In England, as elsewhere, much of the focus of digital skills training is targeted at groups who are considered to be most ‘in need’. Given that adults who are better off and better educated tend to report more use, confidence and skills with the internet (Ipsos Mori, 2017; Ofcom, 2018), many digital skills programmes are directed at those who are unemployed, socially excluded through ill health and/or live in deprived areas, as exemplified by the launch of the Digital Skills Innovation Fund in 2018.⁴ Assumptions are often made within digital policies about the motivations, experiences and needs of these groups, which are not necessarily strongly connected to the everyday experiences of individuals (Orzech *et al.*, 2018). Thus, it is important to explore how the assumptions and strategies underpinning these policies relate to adults’ experiences of learning digital skills.

Methodology

To provide a better understanding of the experiences of developing digital skills, 30 adults who were confident in their digital skills and used the Internet for a wide array of purposes but were from less well-off backgrounds were interviewed about how they learned to use the Internet. The interviews took place in two phases over the period of a year. In the first phase, participants were recruited based on their responses to the Oxford Internet Survey, a nationally representative survey of internet use across Britain,⁵ and in the second, a specialist recruitment agency was used to recruit participants from a number of towns and cities across England. They were all adults from a range of life stages and family circumstances with household incomes of less than £20,000 per year (the median household income in Britain at the time of the study was £26,500) and lived in one of the 20% most deprived areas in England based on the Index of Multiple Deprivation (IMD). Some worked, others were retired, some were unemployed, others were caring for young children or family members, and others had health problems that made it impossible for them to work. All would fit the criteria for inclusion for the majority of digital skills initiatives.

The interviews took place over the phone, and took a life history approach in line with many literacy studies (Barton & Hamilton, 1998) and studies of adults’ technical adoption over time (Murdock *et al.*, 1992). Interviews took around 45 minutes, and

participants received a shopping voucher as a thank you for taking part. Participants were asked about their experiences of using the Internet, how they had learned to use it, and what other things they would be interested in learning about in the future. Additional questions about how they felt their Internet use had impacted (or not) their social circumstances were also included in the interview. The survey responses generated as part of the sampling strategy (e.g. geographic location, life stage and circumstances) were used to inform the interviews where appropriate to facilitate the conversation. Reflective notes were also taken after each interview. All the interviews were recorded and transcribed. These texts were then subject to a process of thematic analysis, used to draw out the experiences of how interviewees learned to use the Internet that form the basis of the following discussion. An iterative coding process was utilised to refine the themes, visualise the data and test alternative explanations (Dey, 2003; Corbin & Strauss, 2008; Saldaña, 2015). The resulting themes and arguments were considered, alongside existing literature and the policy context above, with specific attention to aspects of social justice. These were used to develop understanding and to test out propositions that emerged from the interview data.

Throughout all stages of the research, from recruitment to the dissemination of the research, a reflexive approach was taken that was mindful of the potential unequal power dynamics between interview and interviewer (Kvale, 2006). The interviews were conducted with the intention that highlighting the experiences of individuals from less well-off backgrounds is a way to empower individuals and have the potential to facilitate social change (Miller & Glassner, 2010).

Becoming digitally literate in England: everyday experiences

In this section, the findings from the 30 interviews are presented in three parts. ‘Beginnings’ demonstrates that the way that people learn to use the Internet typically came from a combination of opportunity, interest in achieving a particular goal and typically some form of external motivation. ‘Learning new digital skills: learning ecologies’ highlights how the configuration of sources of people, contexts and technologies both constrain and facilitate opportunities to learn. ‘Discontents and a desire for change’ shows how interviewees often had concerns about the role of technology in society and wanted a ‘better’ Internet that promotes a more democratic and fairer society for everyone. In all three subsections, a consistent theme is the disconnect between policy and the experiences of the interviewees, where digital skills are narrowly framed and not connected to the wider educational agenda that individuals seek.

Beginnings

Interviewees recalled that their original impetus for beginning to learn to use the internet typically came from a combination of opportunity, interest in achieving a particular goal and typically some form of external motivation. Opportunities arose in various contexts, including: parents getting the Internet for their child to help with homework, accessing the internet at work, or upgrades in phone contracts—particularly the shift from a ‘normal’ to a ‘smart’ phone.

A few had particularly strong intrinsic motivations to learn to use the technology to keep up with the times, or because learning to use technology was interesting to them. For most interviewees, external motivations were an essential component to motivate engagement. Examples included family or friends encouraging use (e.g. to get on Facebook, WhatsApp, Friends Reunited or MSN), work or educational requirements, using the internet to support the running of the household and family life, or to achieve a specific goal—such as providing entertainment or job seeking.

All the interviewees had a slightly different story to tell, but ultimately the rewards of using the Internet came from the role it could play in achieving something in their life that was meaningful to them. So, for example, John⁶ first used the Internet at university, accessed via computer rooms, prompted by a friend to find his friends' email addresses and email them. Michael first used the Internet via dial-up on a 'tower' computer as a teenager when he lived with his sister. He would use it to check all the football results for his own enjoyment and his '*nana [who] used to do the pools*'. Lamar first had a computer at home when he was at secondary school to help with school work and used MSN Messenger to '*chat to your mates*'. Jessica got a computer and the internet at home to help with her daughter's schooling, and in doing so she learned to use the Internet to help with homework, pay for school lunches and '*look at the local newspaper online*'. Jacky was introduced to the Internet by her children and had learned to use it because '*you've got to keep up with the times*' (...) and because '*most things are done over the Internet*'. In her 60s, she felt she was different to many people of her age '*because I'm on my own I don't like to be a burden on anybody*' (...) so you've got [to] do it'.

The accounts of the interviewees about the ways they first learnt to use the internet is at odds with the ways that digital skills programmes are often designed. Many of the schemes for adults are either on a drop-in/sign-up basis or people are actively encouraged/directed to attend by the job centre. This risks that the dominant experience for adults who have limited skills to use the Internet can be one where they have an immediate task to complete (e.g. benefits application, job application), where there is an immediate negative consequence if they do not achieve it successfully (Smyth & Breshears, 2017; Allatt & Tett, 2019), or where their old occupation may no longer be available to them for reasons beyond their control (e.g. due to job cuts in their area or personal health reasons), which may mean an IT role is being 'forced' upon them as the only option. These approaches are not aligned with informed understandings of adult learning which prioritise the social context. Approaches which foreground the needs of the learner (see Barton & Hamilton, 1998) and support a more positive and open experience encourage more meaningful engagement (Smyth & Breshears, 2017).

The majority of people interviewed for this study could describe how their use of and expertise with the internet developed over time, typically occurring as a result of interconnections between social relationships, varied institutional practices and technological developments.

Learning new digital skills: learning ecologies

Interviewees talked about how they learned new digital skills from a configuration of sources of people, contexts and technologies, which can, as noted in the literature

review above, be described as a learning ecology: ‘the set of contexts found in physical or virtual spaces that provide opportunities for learning (...) where each context is comprised of a unique configuration of activities, material resources, relationships, and the interactions that emerge from them’ (Barron, 2006: 200).

Often people would stress the social element of learning about new things to do with the Internet. For example, Bob talked about how he was a bit ‘nosey (...) *I will speak to people from time to time (...) Where did you find that? How did you manage to [do that] ...?*’ Similarly, Debbie talked about how she learned about new apps (e.g. What-sApp, ‘*to save money on pictures*’ and Collage, ‘*to compare pictures side by side*’) from conversations with family and friends.

If the interviewees got stuck, people often talked about how they could ‘*figure things out for themselves*’, either through trial and error, instructional videos on YouTube, or advice on forums. As Michael said, ‘*You have to do stuff for yourself to find out. If you get it wrong, you know not to do it again the next time*’. When this did not work, the majority of interviewees tended to have a friend or family member who was good at technology. As Lisa said, ‘*I find my way round it. But if there’s something I don’t know, which isn’t very often, I’ll ask my daughter*’. Less common strategies included contacting a provider of a service or going to a library. Some people did take courses. Some had been on courses (e.g. ECDL) at the suggestion of the job centre to get a better job. Others had done some training at work to learn new IT systems. Sometimes people did computer courses that were offered free by their library, and a couple paid for college training to get the most out of the devices they had bought (e.g. moving from a PC to a Mac).

In addition to other people and institutions, the trends and affordances of technology also played a part in skill development. For example, Michael talked about how, in the early days of using the Internet, he took a lot of time trying to work out how to get music on his Sony Ericsson Orange phone: ‘*it told me it was a music phone (...) it was like a Walkman as well as a phone (...) And I remember going onto the internet to try and find music to put onto [it]*’. Many talked about how, thanks to apps, everything was quite self-explanatory. For example, as Anne described when learning to sell items on eBay, ‘*It’s dead simple, because it’s step by step*’.

The increase in the availability of mobile devices also mattered. For example, Karen could identify an increase in use (and associated skills) when she got a tablet, ‘*It’s more compact and a lot easier because before it entailed going and getting the laptop out and the cable, plugging the cable in and sitting down with the laptop (...) with the tablet I (...) walk around the house*’. Not everyone had ideal access to the internet, which meant that some activities were curtailed or had to be dealt with elsewhere (e.g. the library for printing out, desktops at family members’ homes for a bigger screen for job applications or price comparisons). Others, who only had a mobile phone, found the screen size problematic for certain tasks. Thus, while in some ways mobile devices and apps may be making technology easier to use, it was not universally positive.

Very few appeared to have a deep understanding of the hardware and software they were using. Some were appreciative of others in their social network who had set up a device for them, so they could just get on and use it. One exception was Lamar, who ‘*sort of taught himself (...) ‘No one’s ever sat down and showed me how you do it. But I feel I’m at a point where a lot of it’s quite intuitive now (...) [computers are] all like one and the same really once you know a lot of the basics aren’t they?’*’.

These experiences relate to other work in this area, demonstrating that people tend to learn skills via experimentation and informal learning, with a more limited (though important) connection with formal education (Van Dijk, 2005). They also highlight the importance of social support in facilitating internet use (DiMaggio *et al.*, 2004). Indeed, this way of learning digital skills seemed to have worked quite well for the majority, although a challenge for some was finding out about new possibilities of the internet, as people only knew as much as they wanted or were able to discover from their existing learning ecology. For example, Anne said *'I can't imagine what else there is to use it for. (...) I mean, not that I've done everything already, but just that I don't know what else the internet could do that it isn't already possible for me to do'*. Similarly, Debbie talked about how *'my phone can do a million things that I don't know'* and she did not know if there were things she would like to use the Internet for in the future because *'I'm probably not aware of them, I'm probably not aware of a lot of things'*. Martin, who cared for his wife who was housebound, had not heard about Massive Open Online Courses (MOOCs), despite actively looking for free online courses.

Similar to the ways in which the interviewees' social networks shaped what they could learn about, the design of technologies both supported and inhibited new skills. On the one hand, mobile devices and app-based engagement led to a broadening of uptake and use; on the other hand, it reduced people's understanding of the internet—locking down possibilities for more people to change or contribute to existing software (Zittrain, 2008). Indeed, as is shown in the next subsection, the Internet was not a faultless 'thing' that people simply wanted to know how to use. There was some desire for social and technical change.

Discontents and a desire for change

As part of the interview all participants were asked, 'If the Internet was a person, what kind of person would it be?' as a way to explore how people felt about the internet. The answers ranged from the highly positive to highly negative, with varying emphasis on information, social connections, entertainment, advice, commerce and crime as both benefits and challenges, and a relationship that ranged from distant colleague to a member of the family. Indicative comments included:

- *'A clever person (...) well-dressed (...) like, a business man (...) when I'm doing the Internet, I've not really got any issues (...) nothing goes wrong, so, I won't see like, a young, 18-year-old guy in trainers or a tracksuit or anything like that. I see like, a smart man (...) a clever, business man.'* (Michael)
- *'Probably liken it to my dad, who was very knowledgeable' (...) 'He used to be somebody that I would, no matter what it was, if I had a question or a query or anything I would ask my dad.'* (Sophie)
- If the internet was a person it would be *'helpful' (...) 'informative, helpful' (...) 'I was going to say reliable but that's not true, that's not true at all.'* (Susan)

Interviewees tended to see the Internet as a complex entity, which was useful to them but also complicated:

- *'I would say a bit deceiving as well. Because (...) there's always something that you don't know about; there's always more, which makes it interesting, but on the other hand, there's a lot of deception and safety/security-type worries with the Internet as well.'* (Aileen)
- *'A [small] man, giving out orders because I just think it's so ... it's quite structured now isn't it? (...) And you go on one thing and then it tells you to go on another, and another and another. And you're just following links along, you know? (...) But we don't have to do it this way, we can do it our way, and we can find out ways to change.'* (Jessica)

The complexity of the benefits and challenges of the Internet were not just discussed in response to this one question, but were common throughout the interview, and highlighted the complex interplay between the digital and everyday life. For example, some raised concerns about government use of the Internet as a surveillance tool as they looked for a job, and the risks to their benefits if they did not actively demonstrate they were engaging in online job-seeking activities. Interviewees also talked about how technology had negatively impacted employment in their area. Mathew explained how the factory near him used to employ *'about 5,000 people, and now you are lucky if it is 500'* because of automation.

Others discussed how businesses were profiteering from the Internet by providing easy access to betting shops, payday loan companies and pawnbrokers that used to only be available in face-to-face settings. As Fiona said, *'You've got these [payday loan sites] (...) where you can log on online and get this and get that. And yes that's all okay, but I think, with poverty now in the UK (...) we need to start protecting [people] from things like that (...) and give them a bit more other than a route of debt'*. She went on to argue, *'Now, you can do it all over the screen—you don't have to go in to a shop and see someone'. (...) The Internet is good when it's good, but when it's bad, it's bad'*.

Others were concerned about the lack of regulation in other contexts. As Michael explained, when he was at work his boss checked he did his job properly, but the internet *'is not like that. This is people all over the world, so there's no way to constantly check it (...) I just think, like, there should be (...) something in place (...) to just try and find a way of policing the internet better. (...) The internet is not all a good place. It's a fantastic place to go, but it's not all flowers and roses and meadows and stuff (...) There can be some daunting, dark places on the Internet that you can access. What you can do and get away with. I know people that sell drugs over the internet so they don't get caught. (...) There's things like that. How easy it is to do stuff like that'*.

Relatedly, Bob felt that there needed to be more conversations about what kind of behaviour was appropriate online, *'You've only got to click on Facebook and (...) there's a person stood there with their phone filming [an incident] instead of helping them. I think that sort of thing, that's the culture. We're in a very high-tech world now and people are forgetting what [the] priorities are. (...) I think somebody needs to calm it all down if it's possible (...) it's like well, it's up to everybody [to do something about it]'*.

These views connect with the wider population, where, for example, 50% of internet users in England 'have concerns about the Internet' (Ofcom, 2018) and 70% of Internet users in Britain are not comfortable being tracked by advertisers (Blank & Dutton, 2019). It echoes work by critical scholars, who have highlighted how the design and use of commercial and public digital systems can reinforce existing social

disadvantage (e.g. Eubanks, 2011; Gangadharan, 2017). The concerns raised by interviewees are not just about having more skills to evaluate sources, or keeping safe online by being aware of credit card theft (although these are important). They speak to bigger concerns about the role of technology in society, about the role of the commercial sector, government and individuals in creating an Internet that promotes a more democratic and fairer society for everyone. It connects to a wider educational agenda that takes us beyond skills, towards recognition of a wider responsibility of all stakeholders.

Discussion

The digital skills agenda as set out by policymakers in England is very much geared towards the needs of the economy, and this agenda is intensifying. The current digital skills framework encodes a way of thinking about digital skills that is narrow and instrumental, with more emancipatory and creative ways of using technology reserved for 'advanced users'. Yet, although the narrow and economic framing is increasingly dominant in policy documents, there coexists some level of recognition that the Internet is also something that could empower people.

As noted in the Introduction, this focus on learning specific skills, as opposed to a focus of providing a democratic education for adults, is not unique to digital skills policies and has been raised as a problematic focus for adult and lifelong learning policies more broadly (e.g. Biesta, 2006; Ade-Ojo & Duckworth, 2017). The people interviewed for this study similarly stressed the need for an educational framing in learning to use and indeed shape the Internet.

Given this context and the move in England for the DfE to take the lead on initiatives in this area, it seems an opportune time to reframe the future digital skills agenda. In trying to encourage a democratic relationship between individuals, educational institutions and the state, where all parties together are working to determine what is valued by society (Biesta, 2015), the findings from the interviews highlight that there are three main areas of focus where change may be possible. These are: recognising learning across the life course, making a commitment to use the Internet for social change, and questioning the appropriate role of the commercial sector in facilitating the future digital skills agenda. Each are reviewed in turn.

Recognising learning across the life course

Interviewees provided a rich account of how and why they learned to use the Internet that demonstrated an array of personal, democratic and sometimes economic motivations, embedded within their everyday lives and support networks. They talked about how they first started to use the Internet at an opportune time (e.g. when their child needed to use it for school, or an upgrade in phone contract), when they wished to achieve a particular goal (e.g. upskilling for work or connecting with friends and family) and were encouraged in some way by their social network. These accounts strongly resonate with research on adult literacy that views the development of literacy as a social practice (Barton & Hamilton, 1998), where literacies are understood 'not just as skills, but as social practices that are always embedded in particular

cultural contexts and that are shaped by the purposes they serve and the activities they are part of' (Papen, 2005: 1).

This focus on social practice is not a 'one-off' event. It is part of a process of learning that is taking place throughout life. People draw on their existing experiences to develop understandings and learn new things (Biesta & Tedder, 2007; Allatt & Tett, 2019). The biographical and longitudinal nature of the process of learning about the Internet is clear in the findings sections above, where interviewees told their story of how they learned to use the Internet, and identified key moments when their use of the Internet (and associated skills) changed—often due to a change in life stage (e.g. going to college, becoming a parent, or retirement). Indeed, similar results have been found in the literature on Internet adoption (Anderson & Tracey, 2001; Orzech *et al.*, 2018).

Learning to use the Internet, and continuing to develop digital skills, is a complex process. The findings above support the concept of the learning ecology as a useful way to describe this phenomenon: where any individual's unique combination of material resources (technical and otherwise), social relationships and local context interact together to enable (or sometimes stymie) learning (Barron, 2006; Sangrà *et al.*, 2019). Through this lens, it draws attention to the social elements of learning (and how learning may be limited by the expertise held within social networks) alongside the technical aspects—as the nature of the device and the risks and opportunities the Internet affords come into sharper focus.

The digital skills policies in England reviewed in this article show limited awareness of how and why adults learn. This is problematic as without this awareness, it is not possible to develop initiatives that support meaningful learning. Formal provision of educational opportunities for adults needs to be embedded within an understanding that takes account of people's learning ecologies over time. They need to connect with people's motivations and interests (Eynon & Geniets, 2016; Atchoarena *et al.*, 2017). Similar to Orzech *et al.* (2018), the data above demonstrates how digital skills initiatives could be designed with more awareness of transition in life stage when people may be more likely to turn to technology to achieve certain life goals (e.g. supporting parents of school-age children, linking digital opportunities with work in the widest possible sense, supporting people who suffer from ill health/become housebound, moving from work into retirement, or integrating with community initiatives). This approach, together with a recognition of an individual's learning ecology, begins to offer a path to a more educative, democratic agenda for digital skills.

A commitment to social change via digital means

Scholars of critical digital literacies argue that the current focus on digital skills is too narrow, with a strong focus on operational skills (Pangrazio, 2016). This is supported by the review of policy above, where basic digital skills are defined in ways that encourage people to learn to use or operate existing technology effectively, ignoring more creative or participatory skills. In England, as in other countries, the ability to use 'digital technology in empowering and transformative ways' is left as an objective for those who are developing 'advanced specialist skills' (Atchoarena *et al.*, 2017). In contrast, digital skills initiatives targeted at adults who simply wish to use technology

as part of everyday life and work tend to encourage (or indeed require) participants to accept the status quo of technology use (Gangadharan, 2017). In essence, such policies are positioning individuals as obedient users of commercial products that may not always be designed in their best interests.

The interviewees rarely aspired to be coders or could be considered advanced Internet specialists. However, they did have concerns about the current role of the Internet in society. Though they valued having the ability to use technology in their lives, they also saw many negatives that disproportionately impacted those who were already less well off in society: the use of the Internet as a surveillance tool, the risks of automation, the easy access to payday loans and gambling sites, and the lack of regulation were just some of the concerns raised. It seems then, at best it is a missed opportunity, or at worst a form of exclusion, to focus primarily on operational skills even for those who only wish to learn the basics of Internet use.

As Luke notes, the development of digital literacies should be viewed as a form of social and democratic participation (Luke *et al.*, 2018): finding ways to educate people about digital life that is explicitly political and intended to lead to social change (Hagood, 2002; Luke, 2012). This project both supports and extends Luke's point. Not only were participants concerned about the negatives of the Internet, but many also wished for a fairer society. As Forster *et al.* (2018) argue in their discussion of adult education, 'the different traditions of community adult education can be seen as a resource not only for resistance against deteriorating communities and social inequalities, but also in strengthening the subjectivity of its learners' (p. 16). As noted above, recognising individuals' plans for the future, alongside the configuration of social networks, technical access and other resources, forms an important part of this process. Formal educational initiatives that encourage community-focused approaches to learning about technology is one way this more democratic form of education, that goes beyond skills training, could be achieved (Loader & Keeble, 2001; Keeble & Loader, 2005; Hayden & Ball-Rokeach, 2007; Veinot & Williams, 2012).

Questioning the role of the commercial sector

The final central point to emerge from the analysis above is the need to reconsider the role of the commercial sector in the development, implementation and evaluation of digital skills policies. As highlighted in the policy section of this article, there are a significant number of commercial actors who are engaged in framing, facilitating and measuring digital inclusion in England. The digital skills partnership includes an array of corporations who advise, invest and measure digital skills. It is likely that part of the reason why digital skills is conceptualised in relatively narrow terms in Britain, prioritising operational skills over more creative, participative or critical dimensions, is because of the level of commercial interest in this space.

The ways that commercial actors are able to shape educational policy in line with their own interests are well recognised (e.g. Ball, 2012, 2017; Garcia *et al.*, 2018). As this article demonstrates, though the current way of framing digital skills may favour the commercial sector and fit with governments who wish to use technology as a way to offer more efficient public services, this framing does not reflect the ways that the

interviewees are talking about their own skills in using technologies, or reflect what they wish to learn in future. If there is a genuine wish to enhance the digital skills of the whole population, in ways that not only genuinely contribute to the economic needs of society but also support more personal and democratic motivations (Biesta, 2006), the current agenda is insufficient.

Conclusion: bringing education into digital skills policy

Digital skills are not a panacea for current times, but they are important and should form part of educational policy. Yet as this article has shown, an educational framing is largely absent from the policy debates, which are primarily instrumental, individualist and economic in nature. Digital technology is something that is almost done to the individual; it is not something the individual can engage with, critique or change. This is in direct contrast to the experiences, motivations and hopes of adults interviewed for this study, who learn about and use digital technologies.

The development, implementation and evaluation of digital skills policies for adults need to be revised in order to have a stronger democratic and educational agenda, which includes a stronger explicit commitment to supporting social and technical change that promotes a fairer society for all. Alongside more community-based approaches that connect with the experiences and motivations of adults, this may well require a reframing of a digital skills agenda that is less influenced by the needs and interests of the commercial sector. Given the current policy attention in this arena, this is an opportune moment to shape and broaden the focus of supporting adults to learn to use the Internet. Reframing digital skills as part of a broader adult education agenda may offer a way to facilitate the development of digital literacies that individuals seek.

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Ethical statement

This study adhered to the 2013 guidelines of the British Educational Research Association. Ethical approval was given by the Oxford Internet Institute at the University of Oxford, UK.

Data availability statement

Research data are not shared.

NOTES

¹ <https://publications.parliament.uk/pa/cm201617/cmselect/cmsctech/936/93602.htm>

² <https://www.gov.uk/government/publications/government-digital-inclusion-strategy/government-digital-inclusion-strategy>

³ <https://www.gov.uk/guidance/digital-skills-partnership>

⁴ <https://www.gov.uk/government/news/new-funds-to-boost-diversity-of-people-working-in-digital-and-tech-jobs>

⁵ For details about the Oxford Internet Survey, please see <https://oxis.oii.ox.ac.uk/>

⁶ All names are pseudonyms.

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